

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: David C. Ward et al.

Serial No. 07/841,910

Group Art Unit: 1803

Filed: February 26, 1992

Examiner: L. Eric Crane

For: **MODIFIED NUCLEOTIDES AND METHODS OF PREPARING
AND USING SAME**

Lieberman & Nowak
292 Madison Avenue
New York, New York 10017

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

TERMINAL (STATUTORY) DISCLAIMER

Yale University, a non-profit corporation organized under the laws of the State of Connecticut and having offices at 451 College Street, New Haven, Connecticut 06520, is the assignee of the entire interest in

- (1) the above-identified U.S. Application Serial No. 07/841,910 for "Modified Nucleotides and Methods of Preparing and Using Same" filed on February 26, 1992 (hereinafter the subject application), which is a continuation of U.S. Application Serial No. 07/130,097, filed December 7, 1987, which in turn is a divisional of U.S. Application Serial No. 06/496,915, filed on May 23, 1983; and

ENZ-1(c)(DIV. II)

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- (2) U.S. Patent No. 4,711,955 that issued on December 8, 1987, for "Modified Nucleotides and Methods of Preparing and Using Same" based on U.S. Application Serial No. 06/496,915, filed on May 23, 1983 as a continuation of U.S. Application Serial No. 06/225,223, filed on April 17, 1981;

both by virtue of an assignment recorded with the United States Patent and Trademark Office on February 24, 1982 at Reel 3950, Frames 423-427, in connection with the aforementioned predecessor application, Serial No. 06/225,223 (filed on April 17, 1981). A copy of the recorded assignment is attached hereto As Exhibit A. As the assignee, Yale University, through the undersigned, has reviewed the evidentiary documents and certifies, to the best of its knowledge and belief, that title is in the assignee seeking to take action.

Yale University hereby disclaims the terminal part of any patent granted on the subject application, which would extend beyond the expiration date of U.S. Patent No. 4, 711, 955, issued on December 8, 1987, also assigned to and owned by Yale University, as described above and supported by attached Exhibit A. Yale University hereby agrees that any patent so granted on the subject application shall be enforceable only for and during such period that the legal title to said patent shall be the same as the legal title to U.S. Patent No. 4,711,955, this agreement to run with any patent granted on the subject application and to be binding upon the grantee, its successor or assigns.

ENZ-1(c)(DIV. II)

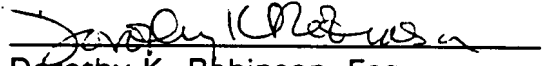
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Page 3 (Terminal Disclaimer)

Attached to this paper is a completed, signed certificate Under 37 C.F.R.
§3.73(b) as set forth in the Federal Register on July 6, 1992 (Vol. 52, No. 129,
29634-29648), and in the Official Gazette on July 28, 1992.

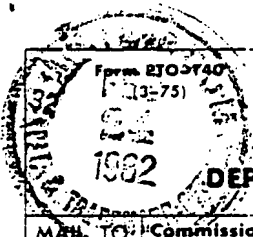
YALE UNIVERSITY

Signed at New Haven, Connecticut
this 15 day of December, 1993

By


Dorothy K. Robinson, Esq.
General Counsel and duly
authorized to sign on behalf of
Yale University

* * * * *



U.S. DEPARTMENT OF COMMERCE
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NEW YORK, NEW YORK 10020

DESCRIPTION OF ARTICLES OR SERVICES TO BE FURNISHED

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ASSIGNMENT FOR RECORDAL:

U.S. Application Serial No. 255,223 filed April 17, 1981

for MODIFIED NUCLEOTIDES AND METHODS OF PREPARING AND USING SAME

FROM

Inventors: PENNINA R. LANGER, ALEXANDER A. WALDROP III and

DAVID C. WARD

TO: YALE UNIVERSITY

P1261 02/25/82 025523 00-0332 2 332 CH

P1262 02/25/82 255223 03-3125 2 332 20.00CH

If additional space is needed attach separate sheet.

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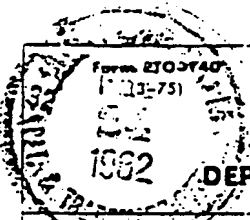
Thomas F. Moran - Reg. No. 16579
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Thomas F. Moran, Esq.
NAME Cooper, Dunham, Clark, Griffin & Moran
30 Rockefeller Plaza
STREET ADDRESS
New York, N. Y. 10112
CITY, STATE, ZIP CODE

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NEW YORK, NEW YORK 10020

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U.S. Application Serial No. 255,223 filed April 17, 1981

for MODIFIED NUCLEOTIDES AND METHODS OF PREPARING AND USING SAME
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DAVID C. WARD

TO: YALE UNIVERSITY

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Thomas F. Moran
Thomas F. Moran - Reg. No. 16579
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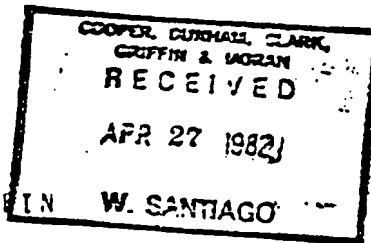
YOUR ORDER NO.
D-18571

Name Thomas F. Moran, Esq.
Cooper, Dunham, Clark, Griffin & Moran

30 Rockefeller Plaza
STREET ADDRESS

New York, N. Y. 10112
CITY, STATE, ZIP CODE

APRIL 12, 1982



TO: COOPER, CUNHAM, CLARK, GRIFFIN & MCGRAN
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW. A DIGEST OF THE DOCUMENT HAS ALSO BEEN MADE AND APPEARS IN THE OFFICE'S RECORDS AS SHOWN:

ASSIGNOR: 001 WARD, DAVID C.
ASSIGNOR: 002 LANGER, PENNYA R.
ASSIGNOR: 003 WALDROP, ALEXANDER A. III

DOC DATE: 09/23/81
DOC DATE: 09/15/81
DOC DATE: 08/21/81

RECORDATION DATE: 02/24/82 NUMBER OF PAGES 005 REEL/FRAME 3950/0423

DIGEST: ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE: 501 YALE UNIVERSITY NEW HAVEN CT A NON-PROFIT CORP OF NEW HAVEN

SERIAL NUMBER 6-255223 FILING DATE 04/17/81
PATENT NUMBER ISSUE DATE 00/00/00

TITLE OF INVENTION: MODIFIED NUCLEOTIDES AND METHODS OF PREPARING AND USING SAME

INVENTOR: 001 WARD,
INVENTOR: 002 LANGER,
INVENTOR: 003 WALDROP,

jointly and severally agreed to and do hereby jointly and severally sell, assign and transfer unto said Assignee, the entire right, title and interest in and throughout the United States of America, (including its possessions and dependencies) and all countries foreign thereto, in and to said invention, said application and any and all patents (including reissues and extensions thereof), of any country, which have been or may be granted on said invention or any part thereof, or on said application or any divisional, substitute, continuation-in-whole or -in-part, renewal, reissue or other patent application based thereon, or based upon said invention, together with the right in said Assignee to apply for such patent in its own name in all countries of the world where such is permissible by law, and the right to claim the benefit of the priority right provided by the International Convention of 1883, as amended to date, and any other such priority rights.

TO BE HELD AND ENJOYED by said Assignee, its successors and assigns, to the full ends of the respective terms for which said patents or any of them have been or may be granted as fully and entirely as the same would have been held and enjoyed by us and each of us had no sale and assignment of said interest been made;

AND we do hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all

United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said Assignee;

AND each Assignor does hereby agree for him(her)self, and for his/her respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any divisional, continuation-in-whole or -in-part, substitute, renewal, reissue, or other applications for patents of any country that might be deemed necessary by said Assignee to fully secure to said Assignee its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

AND each Assignor does hereby covenant for him(her)self and his/her legal representatives and agrees with said Assignee, its successors and assigns, that (s)he has granted no right or license to make, use or sell said invention to anyone except to the extent that (s)he or his/her successors in interest may be obligated to grant and/or have granted a certain license or title rights to the said invention to the Government of the United States of America, acting by and through the National Institutes of Health of the Department of Health and Human Services pursuant to certain grants between the said Government and Yale University, identified as Grants P01-GM20124, T32-CA09159 and T32-GM07499, which require said license and/or

title rights be granted to the Government and said rights shall survive unaffected by the execution and delivery of this assignment, and except to said Assignee, that prior to the execution of this deed his/her right, title and interest in said invention has not been otherwise encumbered, and that (s)he has not executed and will not execute any instrument in conflict herewith.

Executed this 23 day of September, 1981.

X Pennina R. Langer

PENNINA R. LANGER

New Jersey
STATE OF NEW YORK)
COUNTY OF Essex;

On this 23rd day of September, 1981, personally appeared the above-named PENNINA R. LANGER, personally known to me and known by me to be the one who executed the foregoing instrument and subscribed the same in my presence, and acknowledged the same to be her free act and deed, before me.

Olga Galicic
Notary Public

My commission expires: 11/12/83

OLGA GALICIC
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Nov. 12, 1983

Executed this 15 day of September, 1981.

Alexander A. Waldrop III
ALEXANDER, A. WALDROP, III

STATE OF COMMONWEALTH OF VIRGINIA)

COUNTY OF *Henrico*)

On this 15 day of September, 1981, personally appeared the above-named ALEXANDER A. WALDROP, III, personally known to me and known by me to be the one who executed the foregoing instrument, and subscribed the same in my presence, and acknowledged the same to be his free act and deed, before me.

Jean M. Holiday
Notary Public

My commission expires: 2/11/84

Executed this 21st day of August, 1981.

David C. Ward
DAVID C. WARD

STATE OF CONNECTICUT)

COUNTY OF NEW HAVEN)

On this day 21, day of August, 1981, personally known to me and known by me to be the one who executed the foregoing instrument, and subscribed the same in my presence, and acknowledged the same to be his free act and deed, before me.

Dorothy J. Ricker
Notary Public

My commission expires:
My Commission Expires March 31, 1984

A S S I G N M E N T

WHEREAS, we, PENNINA R. LANGER, of Monsey, New York, ALEXANDER A. WALDROP, III, of Charlottesville, Virginia, and DAVID C. WARD, of Guilford, Connecticut, hereinafter referred to as the "Assignor(s)", have jointly invented "MODIFIED NUCLEOTIDES AND METHODS OF PREPARING AND USING SAME" and have jointly filed an application for United States patent based thereon, and so entitled, on the 17th day of April, 1981, Application Serial No. 255,223; and

WHEREAS, the said invention was conceived and first reduced to practice under Yale University auspices, and therefore Yale University, a State of Connecticut non-profit corporation located in New Haven, Connecticut, hereinafter referred to as the "Assignee", desires to acquire the entire right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patents which may be granted thereof, including any and all renewals, reissues, and prolongations thereof.

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, and pursuant to the terms of Yale University's Patent Policy effective as of April 15, 1981, the Assignors have

CERTIFICATE UNDER 37 C.F.R. §3.73(b)

Applicant: David C. Ward et al.

Application No. 07/841,910 Filed: February 26, 1992

For: MODIFIED NUCLEOTIDES AND METHODS OF PREPARING AND USING SAME

Yale University, a university
(Name of Assignee) (Type of signee, e.g., corporation, partnership, university, agency, etc.)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above through a predecessor application, Serial No. 06/255,223, filed April 17, 1981. The assignment was recorded in the Patent and Trademark Office at Reel 3950, Frames 0423-0427, or for which a copy thereof is attached.
- B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:
1. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
 2. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
 3. From: _____ To: _____
The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: Dec 15, 1993

Name: Dorothy K. Robinson, Esq.

Title: General Counsel

Signature: Dorothy K. Robinson